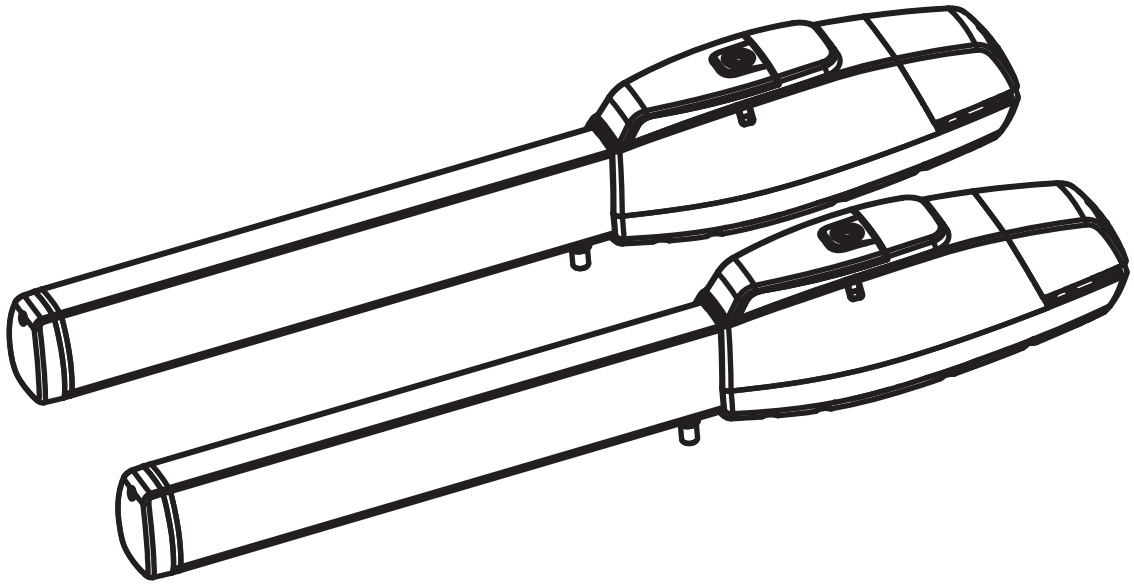
MASTIFF 300/300M
SWING GATE OPENER

USER MANUAL



Reuse
Reduce
Recycle

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1.1 GENERAL PRECAUTION:

WARNING :

This user manual is only for qualified technicians who is specialized in installations and automations.

(1) All installations, electrical connections, adjustments and testing must be performed only after reading and understanding of all instructions carefully.

(2) Before carrying out any installation or maintenance operation, disconnect the electrical power supply by turning off the magneto thermic switch connected upstream and apply the hazard area notice required by applicable regulations

(3) Make sure the existing structure is up to standard in terms of strength and stability

(4) When necessary, connect the motorized gate to reliable earth system during electricity connection phase.

(5) Installation requires qualified personnel with mechanical and electrical skills.

(6) Keep the automatic controls (remote, push bottom, key selectors…etc) being placed properly and away from children.

(7) For replace or repair of the motorized system, only original parts must be applied. Any damage caused by inadequate parts and methods will not be claimed to motor manufacturer.

(8) Never operate the drive if you have any suspect with what it might be faulty or damage to the system.

(9) The motors are exclusively designed for the gate opening and closing application, any other usage is deemed inappropriate. The manufacture should not be liable for any damage resulting from the improper use. Improper usage should void all warranty, and the user accepts sole responsibility for any risks thereby may accrue.

(10) The system may only be operated in proper working order. Always follow the standard procedures by following the instructions in this installation and operating manual.

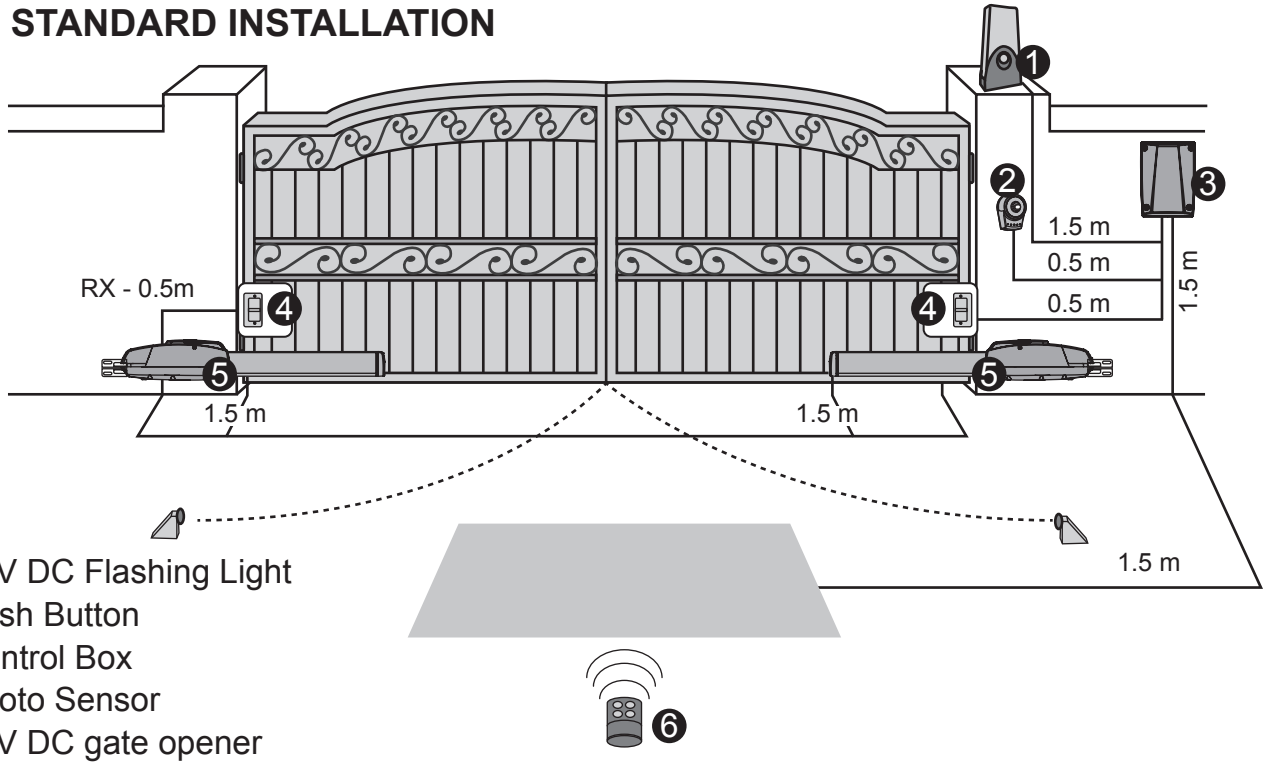
(11) Only command the remote when you have a full view of the gate.

TMT AUTOMATION INC. shall not be liable for any injury, damage, or any claim to any person or property which may result from improper use or installation of this system.

Please keep this installation manual for future reference.

1.2 STANDARD INSTALLATION

A STANDARD INSTALLATION



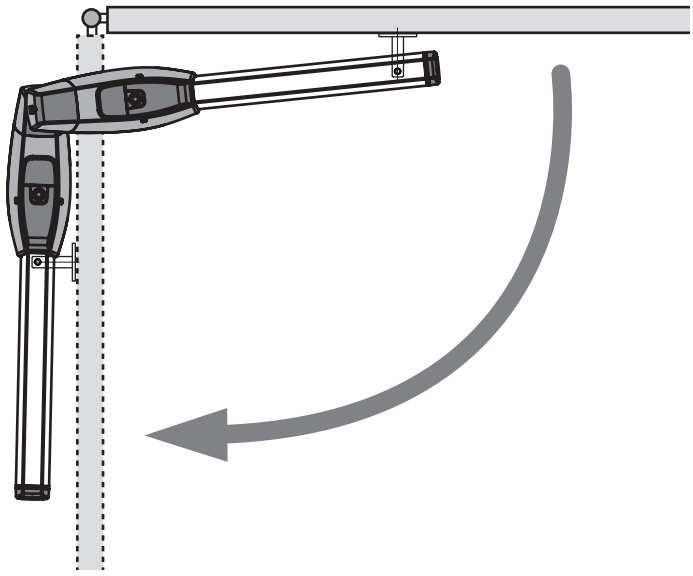
1. 24V DC Flashing Light
2. Push Button
3. Control Box
4. Photo Sensor
5. 24V DC gate opener
6. Transmitter

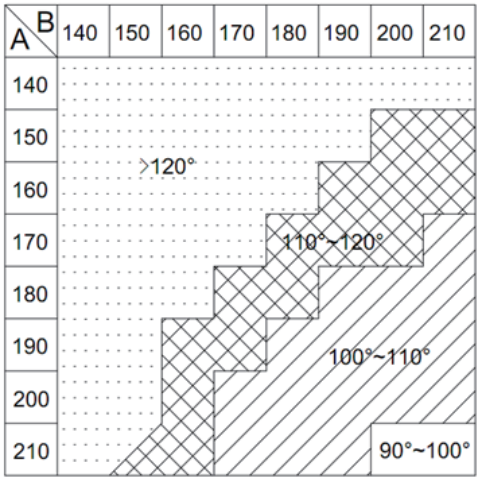
B DIMENSION CHART

Comply with the measures shown on the chart for proper installation. Adjust the gate structure to fit it for best automation, if necessary.

Before preceding the installation, be sure that gate moves freely and that:

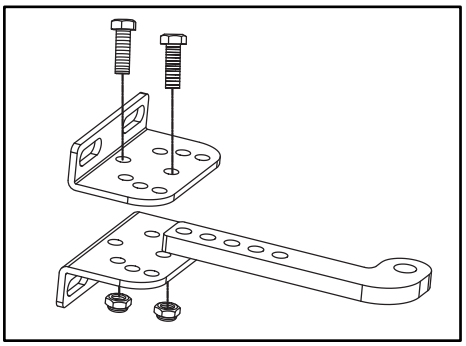
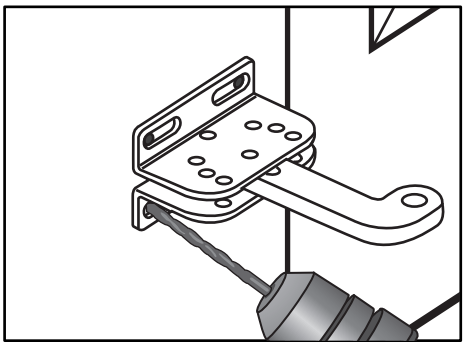
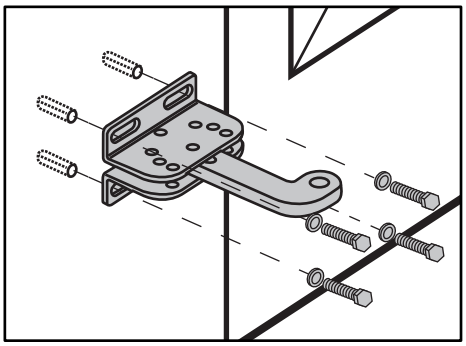
1) Hinges are properly positioned and greased.
2) No obstacles in the moving area.
3) No frictions between two gate leafs or with the ground while moving





C MOTOR FIXING

Assemble the rear bracket and fix it on the pillar.

Remove the wire cover and fix the rear bracket with the pin. Release the gate opener and place the pin into the fitting position no.1 and no. 2

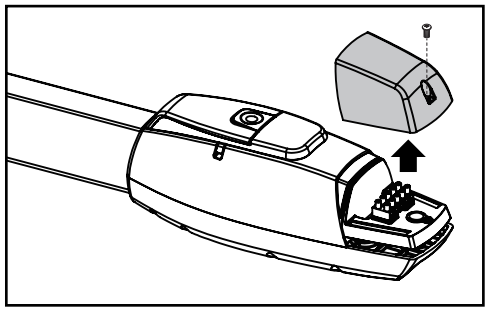
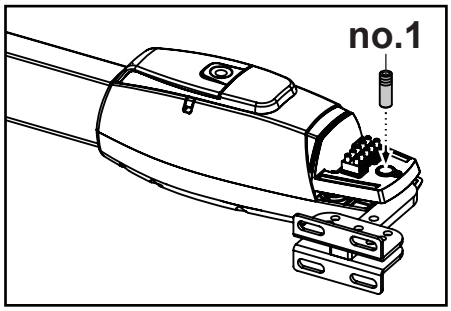
Make sure the gate openers are mounted in horizontal position especially in those positions.

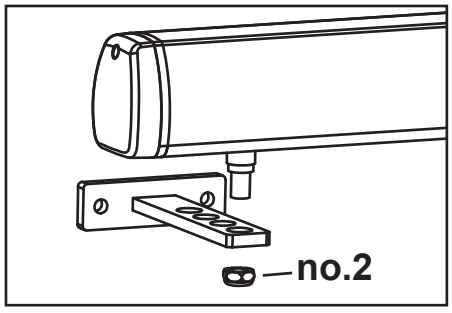
1) Gate in "CLOSE" position

2) Gate in "OPEN" position

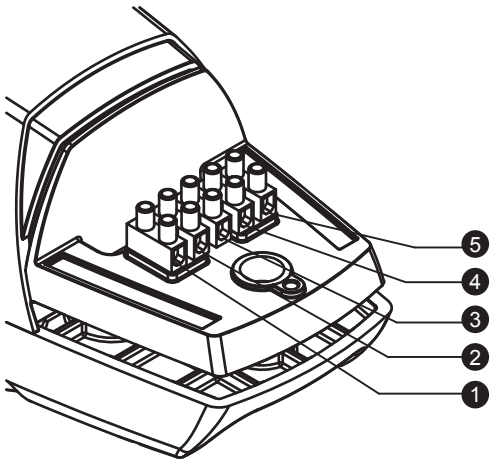
3) Gate at "45 ◦ angle" position

Prior to weld the bracket on the gate leaf(if necessary), cover the gate opener to prevent damages from sparks.



D WIRE CONNECTION:



TO CONNECT MASTIFF WITH CONTROL UNIT

		Standard/MS Motor	With Hall Sensor
❶	White	Motor (+)	Motor (+)
❷	Yellow	Motor (-)	Motor (-)
❸	Red	-	Hall Sensor (5V)
❹	Green	-	Hall Sensor (Signal)
❺	Black	-	Hall Sensor (GND)

CORRESPONDING CONTROL SYSTEM

Standard/MS Motor	With Hall Sensor
CB16, CB17, CB30	CB20

*** MS: Mechanical Stopper**

(1) Avoid tension in the cable during open and close phase.

(2) Always connect the grounding wire(GND)

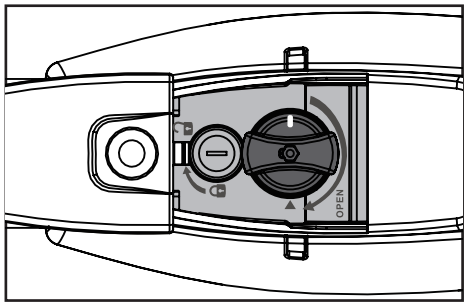
E EMERGENCY RELEASE

In case of power failure, push the lid of release chamber and move forward. Insert the key and turn clockwise to unlock, then turn around the knob to release. To restore the automation, simply reverse the above procedures.

Step1. Push the lid of release chamber and move forward

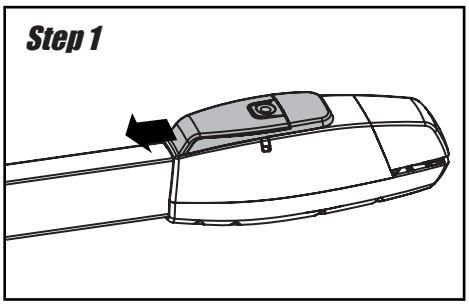
Step2. Insert the key and turn clockwise to the unlock position

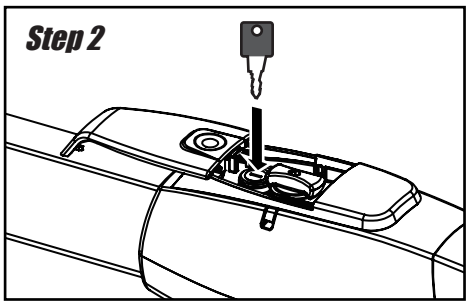
Step3. then turn clockwise the knob to release the motor.

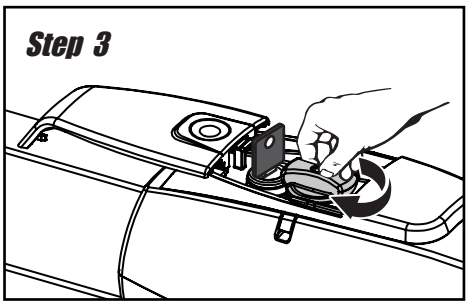


Make sure the White bar on the knob is on the position opposite to the triangle indication.

To restore the automation, simply reverse the above procedure.







F MECHANICAL STOPPER ADJUSTMENT

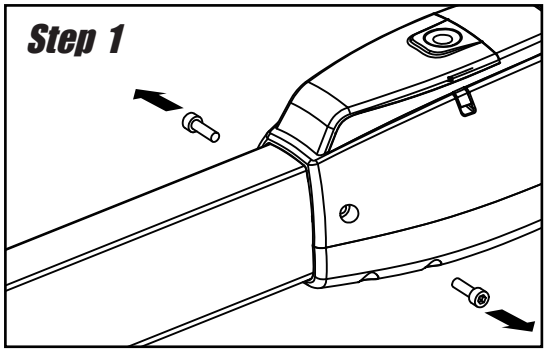
Adjust for the mechanical stopper, follow the below steps:

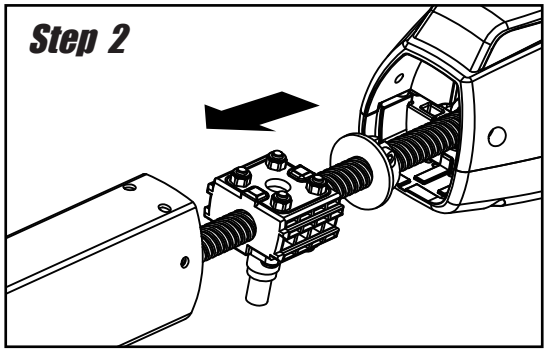
Step1. Remove the screws on both side of the motor cover

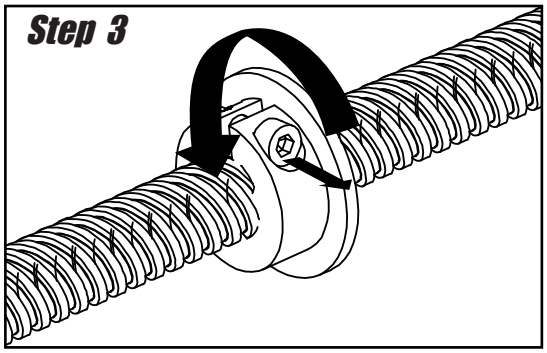
Step2. Push the front external tube forward separate from the motor base

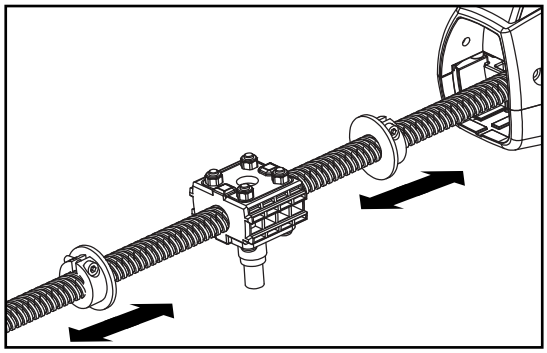
Step3. Release the screw on the mechanical stopper to change the position

* The position of the front and rear mechanical stopper indicates the Open/Close position of the gate







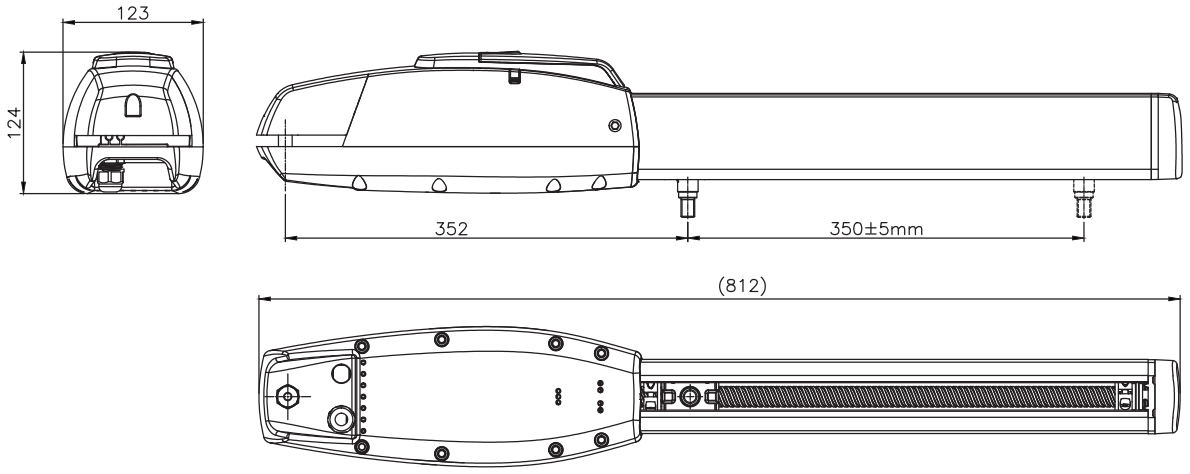


1.3 TECHNICAL FEATURES :

A. Technical Feature:

Motor	24Vdc motor with mechanical release
Gear Type	Worm gear
Max Absorbed Power	144W
Peak Thrust	3000N
Nominal Thrust	3000N
Stroke Length	350mm
Power Supply	24Vdc
Nominal Input Power	2A
Maximum Operating Current	5.5A for maximum 10 seconds.
Maximum Gate Weight	300 kg per leaf
Maximum Gate Length	3 meters
Duty Cycle	20%
Operating Temperature	-20℃~+50℃
Dimension	837mm * 123mm * 124mm
Weight	6.6kg

B. Dimension:



1.4 MAINTENANCE :

Conduct the following operations at least every 6 months. If in high intensity of use, shorten the period in between.

Disconnect the power supply:

(1) Clean and lubricate the screws, the pins, and the hinge with grease.
(2) Check the fastening points are properly tightened.
(3) Make the wire connection are in good condition.

Connect the power supply:

(1) Check the power adjustments.
(2) Check the function of the manual release.
(3) Check the function of photocells or other safety devise.

24V power supply for great safety

Solid material apply with lasting usage

Manual release device with easy use and highly protection

Worm gear application give silence operation

Easy installation and user friendly interface